

Climate Academy 2021

Potential for application of Nature Based Solutions (NbS) in Kampala, Uganda

- Comparison between the Northern bypass and Kampala-Express Highway
- Exploiting Ornamental trade for NbS in Kampala



BBC article, 2012: <https://www.bbc.com/news/magazine-19716687>



The list:

1. Bangkok, Thailand
2. Jakarta, Indonesia
3. Nairobi, Kenya
4. Manila Philippines
5. Mumbai, India
6. **Kampala, Uganda**
7. Lexington, Kentucky, US Jakarta, Indonesia
8. Austin, Texas, US
9. Seoul, South Korea
10. Dhaka, Bangladesh

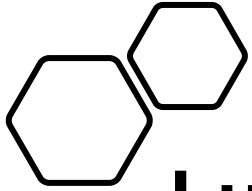


*“We experience traffic jams every morning and evening. And especially when it rains. This is due to **very bad road conditions**, coupled with **poor drainage systems**. The whole place is usually thrown into a total mess even though the stretches of the jams are not that long. Motorists spend hours trying to maneuver through these terrible roads.”* **Bob Sembatya, Kampala**

Kampala Northern bypass

- **Stretch:** 21 Km
- **Funding:** Government of Uganda (GoU) and the European Union (EU) through a loan from the European Investment Bank.
- **Description:** 2-lane highway glides through several suburbs of Kampala city- currently being expanded into a 4-lane
- A development that has enhanced the faster
- Goes through a wetland, the Lubigi wetland
- There is also a water treatment plant along the highway
- **Has the traffic reduced?**

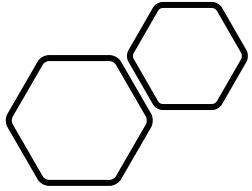




Lubigi wetland

- Important **water catchment area**, serving the city of Kampala and the surrounding areas of Wakiso District.
- Rainwater from the northern and western suburbs of the city **drains, via underground aquifers and surface run-off, into the swamp**
- Supports unique wildlife- **over 200 species of birds**, (crested crane, the national bird).
- Predominant flora is **papyrus grass**
- Faecal sludge & wastewater treatment plant uses the wetland **as discharge point for further purification of wastewater**





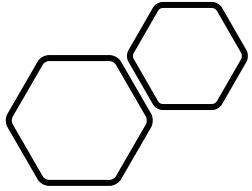
But what has happened?

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© Padraig





When it rains excessively!



1. © Mary Namukose, 2. ©UNRA

UNRA Closes Section of Northern Bypass Over Flooding

Misc • Kampala, Uganda

In a flood alert issued today, the authority said that the road across Lubigi Swamp has become dangerous and impassable following a series of torrential downpours in Kampala. It is now blocked by flooded vegetation from the swamp.

02 Mar 2018 16:30

© Uganda radio Network

*“In a flood alert issued today, the **authority said that the road, in the neighborhood of Lubigi Swamp has become dangerous and impassable following a series of torrential downpours in Kampala.** It is now blocked by flooded vegetation from the swamp”- [Alex Otto](#)*



© UNRA



**Is there
hope?**



May be?
In ornamental trade
But how?



What if?



People dealing in ornamental trade **were empowered through trainings and bylaws by the local governance structures** to be custodians of the Lubigi wetland?

Entities such as **UNRA could be deliberate in partnering with such businesses** in maintaining road reserves through planting and caring for trees



Do you think they would work hard to guard the wetland **against reclamation and exploitation**?

For the **water, soil and nutrients they get from the wetland**?

For the aesthetic value their businesses give the city dwellers?

Meanwhile: the Kampala-Entebbe expressway

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TOP STORY

Mon Nov 23 2020

Uganda's future is born with a green expressway

Kampala-Entebbe expressway is Uganda's first road to be suspended over wetlands and is promising to become a blueprint of how concrete infrastructure can be integrated with the natural environment. ...

Kampala-Entebbe expressway

- Uganda's **first road to be suspended over wetlands**
- **Traverses five swamps** and has four interchanges at Busega, Kajjansi, Lweza and Mpala
- **Crosses 14 seasonal swamps**, stretching 6km, has three toll plazas, one-foot-tall bridge, vehicle overpass bridges, pedestrian overpass bridges and water bodies overpass bridges
- **Promising to become a blueprint** of how concrete infrastructure can be integrated with the natural environment
- **Cost** \$476m (about sh1.8 trillion)- support from China
- **Stretch:** 36.94Km from Kampala to Entebbe and 12.62km from Kajjansi to Munyonyo
- Starts ascending a few metres away from the point where it joins the **Northern Bypass**
- UNRA is taking big lessons from their previous failures by putting in place environmental and social standards
- UNRA, also planting trees along the expressway, to help absorb waste gases



© New VisionUganda

*“Besides its beauty, the Kampala-Entebbe expressway is also ecofriendly. The rich ecological assets, such as wetlands, were left intact as the highway is suspended over swathes of the marshes. The wetlands play the time-honored roles of cleaning wastewater and storing water”- **Robert Kamyá, a resident of Kampala***

What does this mean?

Invitation to:

Research:

- Study the feasibility of exploiting ornamental trade for wetland restoration
- Map the extent of damage and define potential for restoration

Social campaigns: Engage the UNRA and the government of Uganda



Thank you
for your attention